2006 Biennial Report
Governor's Forum On Monitoring

Introduction:

The Governor's Forum on Monitoring Salmon Recovery and Watershed Health (FORUM) was created by Executive Order 04-03 in August 2004, to coordinate monitoring consistent with the *Comprehensive Monitoring Strategy and Action Plan for Watershed Health and Salmon Recovery*.

The FORUM is comprised of state agencies named by the Governor in the Executive Order, and invited federal agencies involved in watershed health and salmon recovery. It also includes representation from the Northwest Power and Conservation Council and the tribes.

According to the Executive Order, the FORUM is chartered to:

> ***Provide a multi-agency venue for coordinating technical and policy issues and actions related to monitoring Washington's salmon recovery and watershed health.***

We envision a coordinated network of state, federal, and tribal agencies able to share data and coordinate spending effectively for developing and reporting the status and trends of Washington's natural resources and restoration efforts.

The tasks of the FORUM outlined in the Executive Order are as follows:

1. Make recommendations on biennial reporting of monitoring results and progress in watershed health and salmon recovery.
2. Foster integrated analysis and reporting of monitoring information.
3. Provide monitoring recommendations to the Salmon Recovery Funding Board (SRFB), the Governor's Salmon Recovery Office (GSRO) and appropriate state agencies.
4. Develop a broad set of measures that will convey results and progress on salmon recovery and watershed health in ways that are easily understood by the public, legislators and Congress.
5. The Forum is also encouraged to develop such indicators with federal, tribal, regional and local partners working on salmon recovery and watershed health so that there is standardization of the measures used.
6. Coordinate with local and regional watershed and salmon recovery groups, tribes, other states, the Northwest Power and Conservation Council, U.S. Environmental Protection Agency, NOAA Fisheries, U.S. Fish and Wildlife Service, and U.S. Forest Service.
7. By January 2006, and biennially thereafter, provide a report of its key activities and recommendations to the Governor, the Legislature, and the SRFB.

In order to accomplish the various tasks, the FORUM formed six technical subcommittees to assist in a multi-agency review of the major monitoring activities involved. The FORUM meets quarterly to address monitoring issues. Figure 1 is a schematic representation of the FORUM structure and subcommittees created.

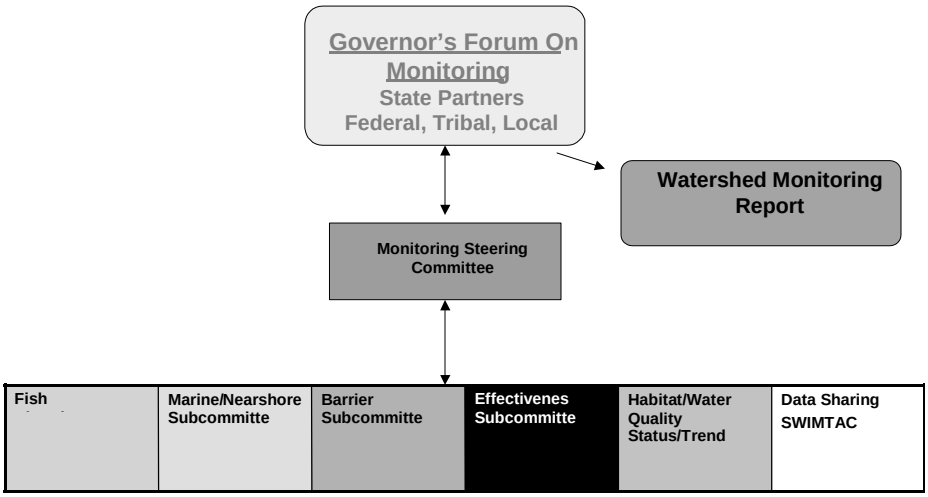

Figure 1. FORUM Structure

This report is intended to provide to the Governor, the Legislature, and the SRFB the first biennial report of its key activities and recommendations.

Coordination of Monitoring Among Agencies

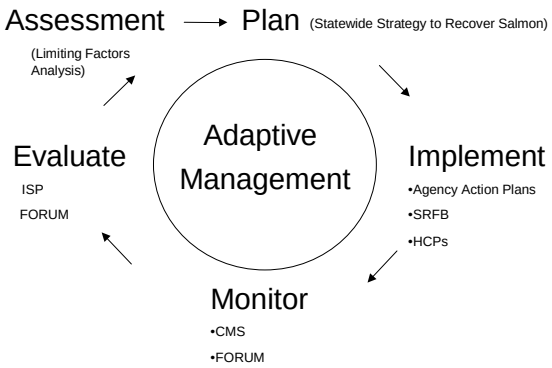

Figure 2. Adaptive Management Loop

The Legislature over the last few years has created an adaptive management framework for salmon recovery and watershed health (Figure 2). The FORUM serves an important role in the adaptive manage process and implements one of the major recommendations of the CMS.

Comprehensive Monitoring Strategy Review

The FORUM held its initial meeting on August 23, 2004. As the first order of business, the FORUM reviewed progress since 2002 in implementing the Comprehensive Monitoring Strategy Recommendations.

The following Table indicates where significant progress has occurred during the 2003-05 and 2005-07 biennia in implementing the 22 high priority CMS recommendations.

Table 1. Comprehensive Monitoring Strategy recommendations and actions taken since 2002.

Line Item	CMS Action Recommended	Actions Taken Since 2002
1	Create a **Watershed Monitoring Council.** • The purpose is to provide an institutionalized monitoring adaptive management process to ensure agencies are working together.	03-05 Legislative Appropriation provided 250K to IAC for a monitoring Council and monitoring manager position. Governor Locke through Executive Order 04-03 created the Forum on Monitoring.
2	Combine State of Salmon Report and other reports into a **Watershed Health report card** • The purpose is to provide the public, Legislature, and the Governor with easy to understand status and trend information about Washington's water quality, habitat, and salmon.	03-05 Legislative Appropriation provided 50K to IAC for funding a Watershed Health Report. IAC, WDFW, Ecology, Conservation Commission, Forest Service, and Governor's Salmon Recovery Office (GSRO) created 2004 State of Salmon report as a transition to watershed health report card.
3	Provide for continued development and reporting of performance measures in the **State Agency Action Plan.** • The purpose of this report is to track agency performance in recovering salmon and has proven to be very useful for Legislative staff and others	Action Plan was produced for the 2003-05 biennium, but has been delayed for the 2005-07 biennium pending publication of ESA salmon recovery plans by the Salmon Recovery Regions. By December 2005 all WA. State Recovery Plans must be delivered to GSRO and must identify actions necessary for implementation.
4	The SRFB and the NWPPC should **implement independent monitoring of restoration project effectiveness** and they should **adopt EMAP protocols** as an interim standard for measuring habitat until a formal protocol can be adopted by the Monitoring Council • The questions to be answered: "Are restoration projects effective in restoring damaged and impaired habitat? Which actions are most cost effective? Which have the greatest longevity?	In 2004 the SRFB funded effectiveness monitoring of 90 randomly selected projects in 9 categories. Monitoring is contracted through IAC. Monitoring may extend for 5-12 years depending upon category. EMAP protocols are being used by SRFB. Preliminary results from some projects will be available by the fall of 2006. NWPCC through BPA has funded the Wenatchee River watershed pilot study. It is intended to test effectiveness of some selected projects. Protocols are a mixture of EMAP and others.
5	WDFW should **update annually specific components of the Salmon And Steelhead Stock Inventory (SASI)** and make it Internet available through the Portal. Update all other SASI indicators every five years. • The purpose of this recommendation is to make salmon abundance and status information available to a wide variety of users	A map-driven server, SalmonScape, now provides quick and easy web access to annual spawner data, SaSI (Salmonid Stock Inventory) stock status, fish distribution, and habitat information.
6	**Measure the condition of habitat, selected water quality indicators and fish presence using EMAP** sampling for streams, lakes, and the marine environment • The questions to be answered :"What is the status of habitat and water quality at the WRIA scale, Salmon Recovery Region Scale and statewide? What are the trends? Are there differences in habitat and water quality based upon land use categories such as agriculture, forest lands, and urban?	The SRFB and the FORUM have been exploring the costs and benefits associated with randomized long-term habitat and water quality sampling. SRFB has currently funded the Department of Ecology to construct a sampling framework for the state that would provide information at the WRIA, ESU, and state scales and to identify the efforts of local entities and volunteers in contributing to a statewide effort.

Line Item	CMS Action Recommended	Actions Taken Since 2002
7	Conduct instream flow studies for critical watersheds	
8	Develop in cooperation with Salmon Recovery Regions selected **intensively monitored watersheds (IMW)** where effectiveness of habitat improvement projects in producing more salmon can be validated. • The questions to be answered: "are habitat improvement projects creating more salmon in watersheds? If so, how much?	The SRFB funded in 2004 monitoring of four clusters of small watersheds to test salmon response to restoration actions. A detailed description can be found at: http://www.iac.wa.gov/srfb/docs.htm. The BPA has funded a pilot watershed in the Wenatchee system that includes an IMW
9	The WDFW and tribes should **provide an annual harvest impact analysis** showing impact of harvest on the rate of wild salmon recovery and de-listing. • The purpose is to monitor whether harvest reduction actions are effective	Though a number of additional work efforts are certainly needed in this area, some significant progress should be mentioned. For example, one provision for NOAA Fisheries authorization of non-directed fishery impacts on listed Puget Sound chinook (under both Sections 4(d) and 7 in recent years), as guided by the co-managers Comprehensive Management Plan for Puget Sound Chinook, is a post-season report that documents fishery performance and actual chinook spawning escapements. The annual report for the 2003-04 represents progress toward effectiveness monitoring as envisioned in the Comprehensive Monitoring Program (reference: http://wdfw.wa.gov/fish/papers/ps_chinook_management/harvest/2003-04_annual_report.pdf).
10	WDFW and the Tribes should develop an **annual report showing percentage of wild stocks meeting spawner objectives**. • The purpose is to monitor our success in providing adequate spawners to the stream and to be able to predict watershed productivity	The number of listed stocks with increased spawners relative to the 1991-1998 baseline average is now an agency performance measure. It was reported in the *State of Salmon Report* and can be viewed in detail in the back up document "*2004 Washington Salmon and Steelhead Abundance Index*". http://www.iac.wa.gov/Documents/SRFB/Monitoring/2004_WA_Salmon_Abundance_Index.pdf. These reports are biennial
11	**Restore 9 juvenile migrant (smolt) trapping sites** cut in the 2002 supplemental budget. • The purpose is to be able to measure status and trends in freshwater production of salmon at key locations statewide. Without a measure of juvenile migration, this cannot be done.	Smolt production was measured in nine watersheds during FY02 and 03 using funding from the SRFB. These included Lake Washington, Green River, Chehalis River, Bingham Creek (Chehalis), Mill, Abernathy, and Germany Creeks (Lower Columbia, Cedar Creek (Lewis River), and the Wenatchee River main stem. A portion of this funding was transferred to monitor smolt production in some of the IMW watersheds in FY04. SRFB funding for the Green River, Cedar Creek, and Wenatchee River monitoring sites ended in July 2005. The WDFW request for state funding in its 05-07 budget package was rejected. Additional smolt monitoring sites remains an important monitoring need for documenting salmon recovery.
12	**Universal Data Interface** Feasibility Study. FY 2004 • The purpose is to tie existing state databases together so that coordinated reports and analysis can occur.	A Decision Package was submitted by IAC on behalf of the SWIMTAC for the 05-07 biennium but was rejected. Decision package for implementing an Interface pilot project was submitted for consideration for the 07 supplemental budget request
13	Design, develop and implement **pilot interface for habitat and project data.** FY2005	See 12 above
14	Fund a **statewide data coordinator** position • The purpose is to coordinate the implementation of data sharing strategies among the natural resource agencies and to preside over the SWIMTAC	Position funded through IAC budget in 03-05 budget. Position filled and functioning.
15	Build Phase 1 of **Web Portal** • The purpose is to create an Internet interface to a variety of state distributed databases.	Web portal funds were provided to IAC in 2003. Web portal was built and functioning as of July 1, 2003. Contains linkages to over 200 state agency databases

Line Item	CMS Action Recommended	Actions Taken Since 2002
16	The WDFW and the Tribes should **develop precision and variance estimates for adult fish abundance surveys** • The purpose is to understand the quality of abundance information used for management decisions	Intensive spawner surveys for chinook in the Skagit, Stillaguamish, Green, and Lewis rivers have been completed, accuracy and precision of alternative estimators evaluated, and preliminary reports completed.
17	Increase the number **flow gauging stations** in priority watersheds • The questions to be answered: What is the daily status of flow? What are the annual and long term trends?	Ecology has expanded the number of stream flow gauges and now operates stations in 11 of the 19 priority watersheds. Ecology is currently seeking funding to maintain the existing stream flow monitoring network with a decision package developed for the 2005 Legislature. ECY 05-07 request level budget would fund 10 additional gauging stations and replace others no longer operated by USGS
18	Implement 5 additional **smolt trapping sites** • The purpose is to be able to measure status and trends in freshwater production of salmon at key locations statewide. Without a measure of juvenile migration, this cannot be done.	Funding has not been secured and this Line Item has not been implemented. In order to meet the criteria for recovery outlined by the NMFS, a smolt monitoring site will be needed in every major population group (MPG) within each ESU. Currently gaps exist in the Lower Columbia, Columbia Gorge, and Mid Columbia areas.
19	WDFW, DNR, should conduct a **fish barrier census** on state and private lands • The purpose is to determine the target goal for expenditures needed to restore fish passage to priority waters	Current data on barriers is incomplete, especially on private lands. More work has been accomplished, but areas exist where no barrier inventories have been completed.
20	**Forest and Fish HCP effectiveness and compliance monitoring** • The purpose is to determine whether the forest practices negotiated in the Forest and Fish agreement are effective in protecting and restoring riparian zones and in reducing sedimentation.	The interagency Cooperative Monitoring Evaluation and Research Committee (CMER) has been monitoring forest prescriptions and developing monitoring implementation tools for private timberlands. The work to date is designed to test the effectiveness of the prescriptions and to explore alternative treatments for meeting timber management objectives. No status-trend monitoring has been implemented as yet to verify overall whether private timberland riparian areas are improving. However, some limited monitoring is planned in the future.
21	**Forest and Fish HCP information systems** • The purpose is to update the DNR Forest Practices Application Review System (FPARS), the water typing system, hydrography data, forest roads data, and to modify the web server to allow public access to the system. Crucial for reviewing and approving 6,000 Forest Practice Applications each year.	The Forest Practices Application Review System (FPARS) Internet site provides all the tools required to complete a Forest Practices Application, search for Forest Practices Applications that have been submitted to the Department of Natural Resources and track your personal Reviewer Notification History. The FPARS was implemented and is currently functioning on line at http://www3.wadnr.gov/dnrapp3/FPAsearch_html/FPARShome.jsp
22	Intensification of **nearshore sampling** • The purpose is to improve current monitoring of eelgrass, floating kelp, and substrate as a first step toward monitoring	Planning has been underway to increase sampling through the Puget Sound Nearshore Partnership, but funds have not been available through the U.S. Army Corps of Engineers as anticipated.

Review of 05-07 Biennial Budget Requests

At the first FORUM meeting it was evident that the 2005-07 biennial budget was about to be submitted. In order to meet task three, the FORUM reviewed the budget decision packages submitted by the state agencies involved in the FORUM. There were two decision packages that were very similar concerning monitoring the status/trends of habitats statewide. The FORUM recommended to the Office of Financial Management (OFM) that the two proposals be combined and reviewed before being considered for funding. Neither project received OFM approval and neither project was inserted into the Governor's budget. Other proposals were reviewed, but no action was taken due to the late FORUM review in the OFM budget process, and because the Priorities Of Government (POG) OFM exercise had been completed.

Habitat Status-Trend Monitoring

The condition of streamside and instream habitat in Washington is crucial to salmon recovery and watershed health because it addresses one of the common listing factors. The State Legislature required the Washington Conservation Commission (WCC) to provide an assessment of the factors limiting salmon productivity within the watersheds of Washington. The WCC utilized all available existing data to evaluate the habitat and provide a snapshot in time of habitat conditions. No habitat sampling program was in existence to draw from, and there continues to be no statewide long term measure of habitat conditions in Washington. Habitat status is the sum total of all unaffected habitat plus habitat restored and improved through various programs and funding sources, minus habitat lost through construction, urbanization, and other human factors. One cannot just measure one factor as a measure of habitat condition.

The Monitoring Oversight Committee, in their 2002 report to Governor Locke and the Legislature, recommended implementation of a statewide status-trend monitoring program using a probabilistic sampling model. It was listed as priority number 6 out of 76 recommendations.

The SRFB has been interested in facilitating the monitoring of habitat condition as part of the monitoring necessary to determine overall SRFB success in restoring habitat conditions. For this reason, the SRFB provided a contract to the Washington Department of Fish and Wildlife with assistance by the Department of Ecology to develop a status-trend monitoring proposal. The proposal was presented to the SRFB at its October 2004 meeting. The proposal included options for remote sensing of habitat in uplands, non-wadeable streams, nearshore estuary areas, and on site sampling in wadeable streams. After reviewing the costs and recognizing the existence of the new Governor's Forum on Monitoring, the SRFB deferred any decision until the FORUM provided a recommendation.

The FORUM, at its November 2004 meeting, ranked Environmental Monitoring and Assessment Program (EMAP) status/trend monitoring as a high priority and instructed the Ad Hoc Committee on Status/Trend Monitoring to combine the interests and proposals of the Conservation Commission, the Department of Ecology, and the Department of Fish and Wildlife into one proposal at a value of $1.9 million dollars per biennium and present this proposal to the Forum at its February meeting. At the February meeting options presented both met and exceeded the assignment in terms of cost. The options attempted to provide a range of possibilities and to show the limitations and benefits of each one as well as the costs. Status and trend are key components of all future research, monitoring and evaluation (RME) programs and will provide the basis for State of the Salmon reports, status assessments and delisting under ESA.

The FORUM, during its deliberations, reviewed an important policy issue. Status and trend monitoring of SRRs is useful to policy makers in describing the status and change of habitat and water quality at a coarse scale, but it is far less useful for management purposes (e.g., establishing total maximum daily loads (TMDLs), adjusting fish harvest limits, or modifying agricultural practices). Conversely, status and trend monitoring of Water Resource Inventory

Areas (WRIAs) is more useful for local and regional policy makers and for management decisions, but is more costly at the statewide extent. Are the large scale questions answered by random sampling and the associated expense sufficiently important for informing the Governor, Congress, the Legislature, and the public to justify the expense involved, recognizing that it may preclude funding other activities at a scale that may answer one or more management questions at a smaller scale? This question led to the creation of a workshop to further discuss habitat with local, tribal, federal, and state monitoring partners.

The FORUM held a workshop in April to discuss this monitoring issue and to review all of the higher-level indicators of salmon recovery and watershed health. The three breakout groups at the workshop continued to recommend that a broad scale habitat sampling program be implemented. As a result, the FORUM, at its April 2005 meeting, recommended to the SRFB that a status trend monitoring framework be built as a first step. The framework would:

1. Contract with USEPA, and Ecology to create a statistically valid statewide sampling framework of randomly distributed sampling locations per EMAP protocol. It would include wadeable and non-wadeable streams and rivers and the sampling design would be developed to answer status and trends at the statewide, Salmon Recovery Region (SRR), and WRIA scale if fully implemented.
2. Work with county, tribal, and local partners to identify where local monitoring efforts can be accommodated into the statewide design, and what it would cost to have contributing partners collect the same data using the same protocols at those sites.
3. Develop a sampling design with 30 sampling stations per domain and an approximate certainty of 80%.
4. Incorporate remote sensing into the sites identified under one above so that land use and land cover can be compared and tracked and correlated with ground measurements of habitat and water quality indicators.
5. Drawing from US Forest Service experience, utilize the most responsive indicators at appropriate time intervals.
6. Develop a strategy that maximizes the use of volunteers.

The SRFB contracted with the Department of Ecology to complete the framework and bring the results back to the Board at its May 2006 meeting for decisions regarding funding in the 2007-09 biennial budget.

Statewide Measures of Salmon Recovery and Watershed Health

Title 77.85.020 of the Revised Code of Washington requires:

1) By December 1, 2006, the governor shall submit a report to the legislature regarding the implementation of the state's salmon recovery strategy. The report may include the following:
    - **a.** A description of the amount of in-kind and financial contributions, including volunteer, private, and state, federal, tribal as available, and local government money directly spent on salmon recovery in response to actual, proposed, or expected endangered species act listings;
    - **b.** A summary of habitat projects including, but not limited to:
        - **i.** A summary of accomplishments in removing barriers to salmon passage and an identification of existing barriers;

   - **ii.** A summary of salmon restoration efforts undertaken in the past two years;
   - **iii.** A summary of the role which private volunteer initiatives contribute in salmon habitat restoration efforts; and
   - **iv.** A summary of efforts taken to protect salmon habitat;
- **c.** A summary of collaborative efforts undertaken with adjoining states or Canada;
- **d.** A summary of harvest and hatchery management activities affecting salmon recovery;
- **e.** A summary of information regarding impediments to successful salmon recovery efforts;
- **f.** A summary of the number and types of violations of existing laws pertaining to: (i) Water quality; and (ii) salmon. The summary shall include information about the types of sanctions imposed for these violations;
- **g.** Information on the estimated carrying capacity of new habitat created pursuant to chapter 246, Laws of 1998; and
- **h.** Recommendations to the Legislature that would further the success of salmon recovery. The recommendations may include:
   - **i.** The need to expand or improve non-regulatory programs and activities;
   - **ii.** The need to expand or improve state and local laws and regulations; and
   - **iii.** Recommendations for state funding assistance to recovery activities and projects.

2) The report shall summarize the monitoring data coordinated by the monitoring forum[1]. The summary must include, but is not limited to, data and analysis related to:

   (a) Measures of progress in fish recovery;

   (b) Measures of factors limiting recovery as well as trends in such factors; and

   (c) The status of implementation of projects and activities.

The FORUM convened a workshop in April 2005 to explore how each of the major regional indicators used in the 2004 State of the Salmon in Watersheds Report (SOS) could be improved in accuracy and scope using:

- Little or no additional funds
- Moderate additional funding
- Major funding

The FORUM Workshop included approximately 60 participants from local, tribal, state, federal agencies and non-government organizations. Through three breakout groups the major categories in priority order were identified to improve the report. The participants said that the following indicators were most important for informing the public, the Legislature, and the Governor. These are:

- Adult abundance. Show harvest and adult spawners on the same charts so that total marine production can be displayed compared to recovery targets. Develop ways to improve confidence limits and to display the results of monitoring populations determined as most appropriate by the recovery plans developed for each SRR.
- Juvenile migrant abundance. Improve the juvenile migrant index to include tribal and other sites not administered by WDFW. Display productivity measurements.
- Habitat and water quality status/trends. Create a statistically valid statewide sampling framework of randomly distributed sampling locations per EMAP protocol. It would include wadeable and non-wadeable streams and rivers and the sampling design would

[1] It should also be noted that RCW 77.85.030 requires the GSRO to provide this report.

be developed to answer status and trends at the statewide, SRR, and WRIA scale if fully implemented.

- Water quantity index. A better way of displaying water quantity problems need to be developed for future reports. More flow gauging stations would help create a better picture of flow problems in the state.
- Barriers. Incorporate federal barrier information into the existing SSHIAP database and display barrier information and targets by SRR.
- Project Implementation. Include information from conservation districts, Bonneville Power Administration, and other sources in future SOS reports in order to better reflect the diversity of effort being expended to recover salmon and to keep our watersheds healthy.
- Estuary/Nearshore. Workshop participants believed that there should be one or more indicators for nearshore habitat as part of the SOS report.

Since April 2005, the FORUM has convened six subcommittees to assist in making the desired improvements in the above listed areas. The subcommittees have provided reports of their progress at the July 2005 Forum meeting. Joe Scordino, Deputy Regional Director for the National Marine Fisheries Service, emphasized to the FORUM that his office is the official channel for reporting ESA progress on the west coast to Congress and to provide assurances through monitoring that the funds appropriated by Congress for salmon recovery are making a

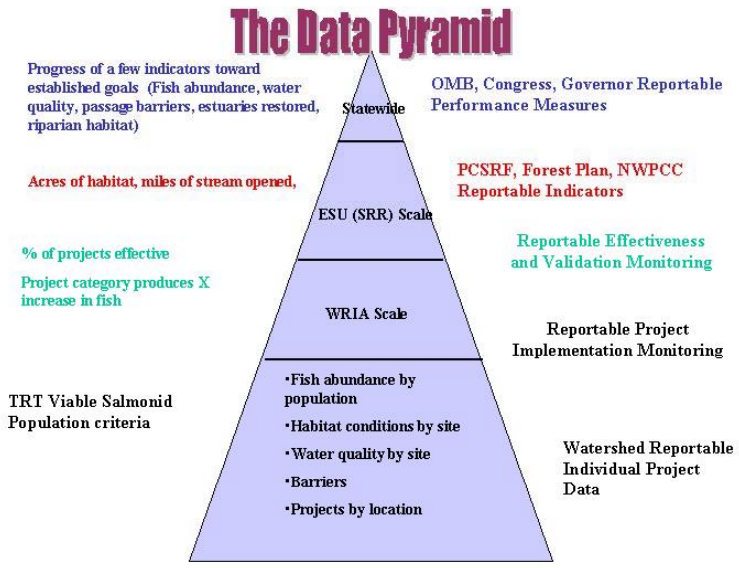

Figure 3. The Data Pyramid

difference and that they are being spent wisely. He emphasized that reporting of salmon progress at the highest levels needed to be compatible with data collected at the watershed level in terms of ESA de-listing criteria. The FORUM engaged in considerable discussion and it was decided that the next step was necessary to provide recommendations to the SRRs that would tie local monitoring efforts outlined in ESA recovery plans with those high level indicators that are reportable to Congress, the State Legislature, and the Governor. The data pyramid (Figure 3) illustrates this connection between high level indicators and the baseline collected at the population and stream reach scale.

FORUM Monitoring Recommendations to the Salmon Recovery Regions

At the October 2005 FORUM meeting the GSRO and the NMFS provided an overview of the criteria needed for de-listing ESA salmon species coast-wide. The following chart provided by NMFS illustrates the two branches of the decision tree that must be considered. On the left are the biological factors that must be considered for viable salmonid populations. On the right side are those limiting factors and threats to survival that created the listing. There must be reasonable expectation that the ESA species is viable and there must be reasonable expectation that the threats to the species have been corrected.

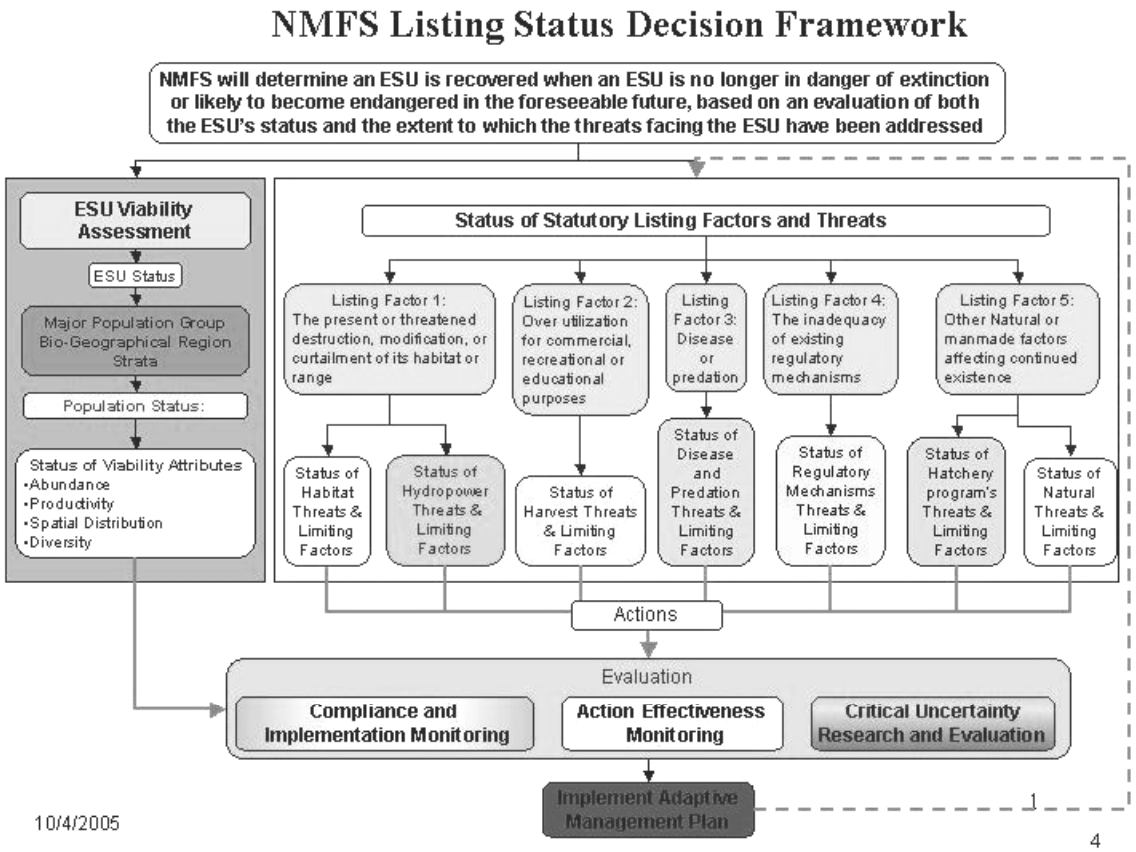

Figure 4. NMFS Listing Status Decision Framework

In view of the above areas of concern and the complexity of the resource in question, the State of Washington will need to make priority decisions and tradeoffs as to what is monitored and at what intensity in order to have a statewide approach that is within the financial realities given that the tendency is to measure all of the things shown in the diagram everywhere all the time. There is a need to balance VSP fish monitoring with the status and trends of threats. Some ESUs have different threats than others. As a result, monitoring of threats may vary somewhat from SRR to SRR. The recommendations for regional coordination of state monitoring that will create a unified approach to tracking recovery of salmon and watershed health are attached to this report.

Recommendations to the Governor and Legislature

The recovery of salmon and the de-listing of federally listed threatened and endangered salmon stocks will depend upon strong recovery plans that are implemented and adequate monitoring to demonstrate that the populations are improving and that the environmental and social factors threatening their extinction and used as criteria for listing have been addressed.

Fish Abundance Monitoring

Existing juvenile migrant trapping sites are insufficient in some portions of the state to evaluate listed salmon species. Until at least one juvenile trap site is available in conjunction with good salmon spawner abundance data for each major population group (MPG), it will not be possible to determine if the salmon populations are meeting de-listing criteria. Funding requests by the Department of Fish and Wildlife that address data gaps for MPGs should be strongly considered if the state is to demonstrate recovery.

Monitoring Cost Sharing

Monitoring costs and activities should be shared through an explicit detailed plan among the State and the Northwest Power and Conservation Council, the US Forest Service, and other participating federal agencies.

Habitat Status Monitoring

There is a need to fund a statewide monitoring program for determining the status and trends in instream and riparian habitat, and changes in land use and land cover that will allow managers to know whether salmon habitat is recovering in each federally listed ESU.

Data Sharing

There is a need within the natural resource agencies to have common requirements and possibly a common database for tracking grants and projects associated with restoring watershed health and salmon recovery so that there can be a summarized reporting of restoration efforts. There have been previous requests for funding of the next phase of the natural resources data portal that will enable composite reporting of key information about salmon recovery and watershed health from multiple state agencies.

Future FORUM Activities

The FORUM will continue to:

- Recommend, refine and improve the State of Salmon Report measurements and establish measurable targets wherever possible in order to track success.
- Work with those involved in the nearshore and marine areas of the state to put together a more complete monitoring structure.
- Review ongoing monitoring and database systems to detect opportunities for cost savings and sharing.
- Continue the dialog with NMFS to determine how much monitoring is necessary to meet ESA delisting criteria and federal court challenges.
- Continue to coordinate recovery monitoring activities across salmon recovery regions of the state.